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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,892	03/31/2001	Jochen Kappel	051207-1010	7564
22827	7590	01/12/2005	EXAMINER	
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			ART UNIT	PAPER NUMBER

2126

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/823,892

Applicant(s)

KAPPEL ET AL.

Examiner

Sue Lao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 2-20 are presented for examination. This action is in response to the amendment filed 9/13/2004. Applicant has amended claims 2, 3, 5, 6, 11 and 16, and canceled claim 1.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 2-5, 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson et al (US Pat. 5,375,234) in view of Tate (US Pat. 5,463,769) and Cramsie et al (US Pat. 5,448,726).

As to claim 1, Davidson teaches a system for providing dynamic definition (update data dictionary to reflect changes to objects) of an application object (objects, col. 1, lines 20-24), comprising:

means for providing an application dictionary (data dictionary) that contains information (information) about the application object (col. 1, lines 9-40);

means for modifying the application dictionary (update the data dictionary) to modify a definition (col. 1, lines 9-40) of the application object (reflect changes to objects). See col. 4, lines 21-52; col. 6, lines 29-37.

Davidson does not teach object-oriented system implementation, means for providing a class dictionary entry that defines meta information about the application object, nor means for validating the application dictionary modification.

Tate teaches object-oriented implementation of dictionary management (abstract, lines 7-8), including means for providing a class dictionary entry (mode dictionary entry for each class, col. 4, lines 31-32) to define the meta information about an application object (dictionary of class method dictionaries). See col. 2, line 50 – col. 3, line 1; col. 4, line 48 – col. 5, line 11.

Given the teaching of Tate, it would have been obvious to implement the dictionary management of Davidson with an object-oriented system and to include

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means for providing a class dictionary entry that defines meta information about the application object of Davidson. One of ordinary skill in the art would have been motivated to combine the teachings of Davidson and Tate because this would have provided a dictionary data structure which simplifies the change of mode of operations (Tate, col. 2, lines 38-40; col. 5, lines 24-34) which is desirable in Davidson (multiple modes supported such as create, delete, etc, col. 4, lines 21-32).

Regarding means for validating the application dictionary modification, Cramsie teaches dictionary management, including means for validating dictionary modification (validation process, verify data model's accuracy). See col. 4, lines 8-34; col. 4, line 63 – col. 5, line 25; col. 6, line 65 – col. 7, line 24; col. 8, line 18 – col. 9, line 3.

Therefore, it would have been obvious to include means for validating into Davidson as modified. One of ordinary skill in the art would have been motivated to combine the teachings of Cramsie and Davidson as modified because this would have provided a dictionary data structure which accommodates growth and is easily available (Cramsie, col. 9, line 50 – col. 10, line 3).

As to claim 2, Davidson teaches means for determining the default location of the application object (origin, col. 1, lines 11-14).

As to claim 4, Davidson teaches means for saving the modified definition of the application object (update data dictionary to reflect changes to objects) (discussion of claim 1). Note discussion of claim 3 for validating the application dictionary modification.

As to claim 5, Davidson as modified teaches (Tate) means for defining a list of allowable attributes (list of supported methods) to be changed (add/delete, col. 4, line 48 – col. 5, line 11).

As to claims 11, it is basically a program product claim of claim 1 except for logic for providing a range definition. Davidson as modified teaches (Cramsie) logic for providing a range definition (value range) for each modifiable application object definition that specifies minimum [min of zero would have been an obvious choice in view of the fact that an object represents a student's course number] and maximum

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values (<100) for the definition. See col. 6, line 28 – col. 7, line 24. note discussion of claim 1 for a motivation to combine.

As to claims 12-15, these are program product claims of claims 2-5, respectively, thus note claims 2-5 for discussions.

As to claims 16, it is basically a system claim of claim 1 and note the equivalence of modifier / means for modifying. Claim 1 does not cover a range enumeration definition. Davidson as modified teaches (Cramsie) a range enumeration definition (range definition) defining a comprehensive list of allowable attribute values for each application object definition (not greater than 100, numeric values only). See col. 6, line 28 – col. 7, line 24. note discussion of claim 1 for a motivation to combine.

As to claims 17-20, these are system claims of claims 2-5, respectively, thus note claims 2-5 for discussions. Further note the equivalence of validation mechanism / means for validating regarding claim 18, and save mechanism / means for saving regarding claim 19.

4. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson et al (US Pat. 5,375,234) in view of Tate (US Pat. 5,463,769) and Fujii et al (US Pat. 6,032,198).

As to claim 6, it is basically a method claim of claim 1 except for component framework environment, one application dictionary for each client and server.

Fujii teaches using application dictionaries (interface dictionary 110, data item dictionary 111) in a component framework environment (client-server applications conforming to CORBA/DCOM architectures), wherein teach client/server component (application, program) is provided with its application dictionary (interface dictionary 110, data item dictionary 111 stored in repository 109) which is updatable. See col. 1, lines 16-39; col. 2, lines 17-59; col. 4, lines 10-19; col. 6, lines 27-61; col. 7, line 1 – col. 8, lines 6.

Given the teaching of Fujii, it would have been obvious to include a component framework environment into Davidson as modified and provide an application dictionary for each of the client and server components. One of ordinary skill in the art

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would have been motivated to combine the teachings of Davidson as modified with Fujii because this would have provided a dictionary can be updated/modified using a more user friendly interface (fig.s 17, 18, col. 10, lines 21-31).

As to claims 7-10, these are method claims of claims 2-5, respectively, thus note claims 2-5 for discussions.

5. Applicant's arguments filed 5/13/2004 have been considered but are moot in view of the new ground(s) of rejection. Applicant amended claims have added limitations not previously recited, thus, requiring a new grounds of rejection.

In response to applicant's request for documentary evidence (remarks, page 7), Cramsie is now cited to show that validating a change to a data structure / dictionary is well known. Note rejection of claim 1 for detailed discussion.

Regarding the amended features of claims 6, 11/16, these are now met by Fujii, and Cramsie, respectively. Note rejections of claims 6 and 11/16 for detailed discussions.

It is noted that the argued validation being deletion, addition and change (remarks, page 7, 1st para.), application information being that allows a component to communicate with others (list of used foreign components) (remarks, page 8, 2nd para.), attribute dictionary entry (remarks, page 9, 1st para.) and range enumeration being a subclass of a range definition class (remarks, page 9, last para.) are not claimed. Therefore, the arguments are not persuasive.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is

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not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Lao whose telephone number is (571) 272-3764. A voice mail service is also available at this number. The examiner's supervisor, SPE Meng-Ai An, can be reached on (571) 272 3756. The examiner can normally be reached on Monday - Friday, from 9AM to 5PM. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 6, 2005



SUE LAO
PRIMARY EXAMINER